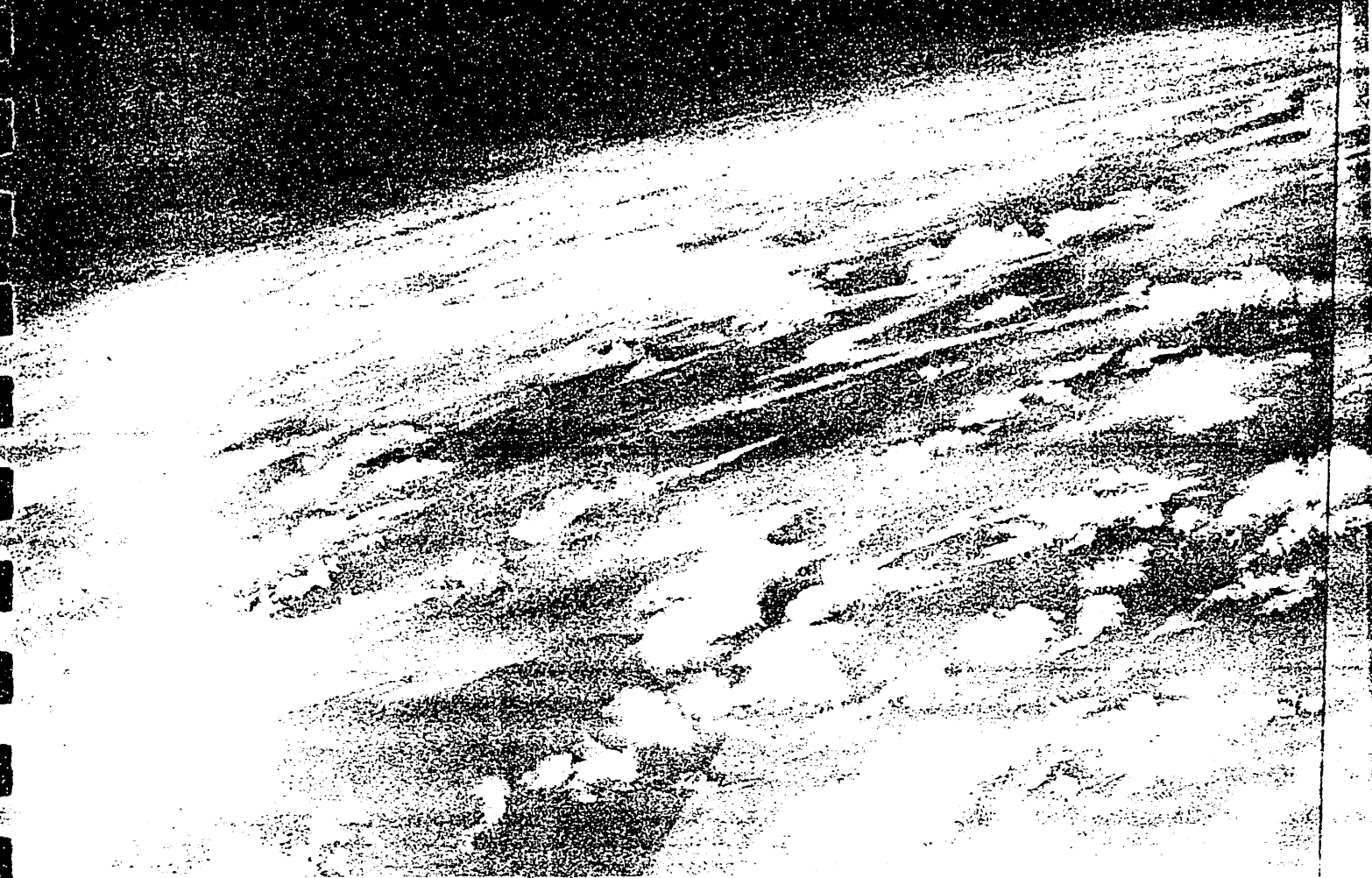


THE EVALUATION OF THE USEFULNESS OF THE MOL TO ACCOMPLISH EARLY NASA MISSION OBJECTIVES



FINAL BRIEFING

*Group 4
Unclassified*

AUGUST 1967

DOUGLAS

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M-40802

MISSION-REQUIREMENTS COMPARISON

	AF MOL	NASA MOL
MISSION	MILITARY	BIOMEDICAL/BEHAVIORAL & BROAD SCIENCE/EXPLOITATION
FLIGHT DATE	— —	1971
DURATION	30 DAYS	1 YEAR
CREW SIZE	2 MEN	4 TO 6 MEN
LAUNCH SITE	WTR	ETR
LAUNCH VEHICLE	TITAN III-M	TITAN III-M OR SATURN IB
GROUND NETWORK	SCF	MSFN
ORBIT	HIGH INCLINATION	28 TO 70° INCLINATION / CIRCULAR
RESUPPLY	NONE	AS REQUIRED
ARTIFICIAL G	NONE	ASSESS PENALTIES

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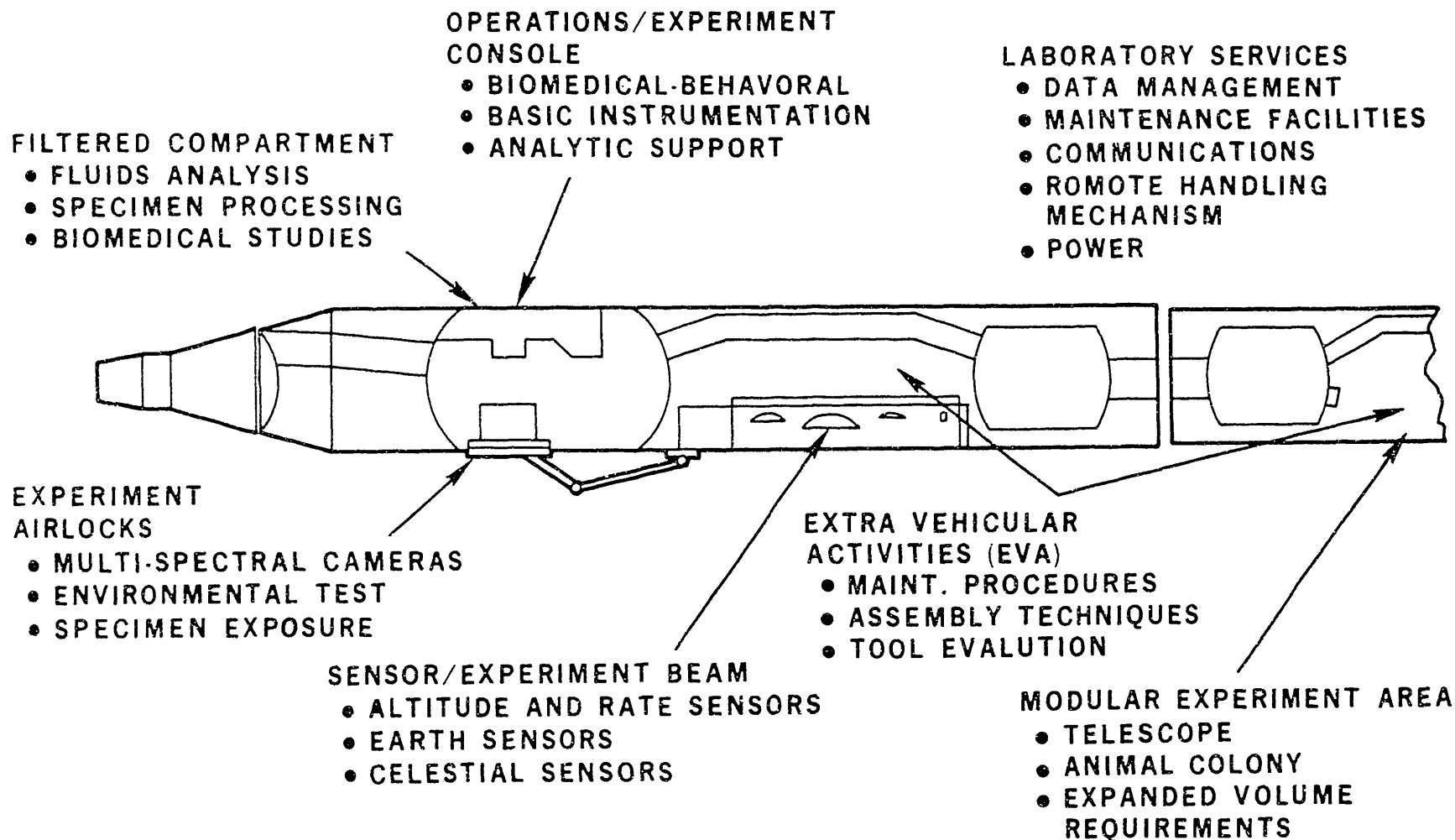
M-40739

BIOMEDICAL/BEHAVIORAL EXPERIMENT REQUIREMENTS

CATEGORY	WEIGHT (LB)	POWER (W)	OPERATING VOLUME (CU FT)
PHYSIOLOGY CONSOLE AND ASSOCIATED EQUIPMENT	98.9	59	3.5
PROVOCATIVE TESTING	29.0	3	92.9
PHYSIOLOGICAL TESTING	100.9	92	52.6
ANALYTICAL AND STORAGE	102.6	103	2.5
COMPARE	34.0	6	1.2
VISUAL/AUDITORY	19.0	4	0.9
TOTALS	384.4	267	153.6

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EXPERIMENT INTEGRATION



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M-40779

NONRESPONSIVE AND PARTIALLY RESPONSIVE EXPERIMENTS

EXPERIMENT NO.	TITLE	REASON
474	RF NOISE SURVEY	ORBIT REQUIRED BELOW F ₂ LAYER
655	HF COMMUNICATIONS	ORBIT REQUIRED BELOW F ₂ LAYER
1756	CONDITIONING BEFORE RE-ENTRY	REQUIRES 260-IN.-DIAM CENTRIFUGE
3032, 3033 3034, 3039	SOLAR ASTRONOMY EXPERIMENTS	REQUIRES INCLINATIONS >70° — (PARTIALLY RESPONSIVE)
418	MULTISPECTRAL SENSING	REQUIRES INCLINATIONS >50° — (PARTIALLY RESPONSIVE)
420	MULTIBAND SPECTRAL TECHNOLOGY	REQUIRES INCLINATIONS >50° — (PARTIALLY RESPONSIVE)
57	MULTIFREQUENCY RADAR IMAGERY	REQUIRES INCLINATIONS >50° — (PARTIALLY RESPONSIVE)
317	FIELD GEOLOGY INVESTIGATION	REQUIRES INCLINATIONS >50° — (PARTIALLY RESPONSIVE)
456	OCEANOGRAPHIC OBSERVATION	REQUIRES INCLINATIONS >50° — (PARTIALLY RESPONSIVE)

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